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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/694,297	10/24/2000	James M. Zombek	20-568	1662

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EXAMINER
BATES, KEVIN T

ART UNIT	PAPER NUMBER
2456	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *18 April 2012*.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5) ☒ Claim(s) *1-23* is/are pending in the application.

    5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6) ☐ Claim(s) _____ is/are allowed.

7) ☒ Claim(s) *1-23* is/are rejected.

8) ☐ Claim(s) _____ is/are objected to.

9) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10) ☐ The specification is objected to by the Examiner.

11) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *4-25-2012*.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

Response to Amendment

This Application is in response to a communication made on April 18, 2012.

The Information Disclosure Statement filed April 25, 2012 has been considered.

Claims 1-23 are pending in this application.

Response to Arguments

Applicant's arguments filed April 18, 2012 have been fully considered but they
are not persuasive.

The applicant argues that the proposed combination of reference fails to disclose
communication of the message by the message router based upon a unique
combination of a server service type and a server identifier. See remarks p. 8-11.

The examiner disagrees:

Ramasubramni teaches that the system (see Fig. 6) includes a network gateway
which routes messages from clients (elements 202, 204) towards physical application
servers (elements 218 and 220). Ramasubramni further teaches the gateway functions
to convert the messages from the carrier networks into an HTTP format that is able to
be transferred over the Internet network (Fig. 12A). Ramasubramni teaches that the
network gateway includes an internal router operates to forward the received messages
from the client to processes of the gateway (See Fig. 13; Fig. 21). Ramasubramni
teaches that those gateway processes can be addressed in messages <u>based on both
the service type of the gateway process (Col. 17, ll. 34 – 49) and of a unique
identification of the gateway process (Col. 18, ll. 45 – 49).</u> While Ramasubramni fails to

disclose that those gateway processes are located on a physical server external from the gateway. However, the rejection relies upon the suggestion of Ramasubramni to teach that the system can work with external servers providing services and receiving messages gateway. *See* rejection of claim 1, listed below. The combination of Ramasubramni with that suggestion would result in the message router of the gateway routing messages to the external servers based upon the message router' routing scheme. That routing scheme as indicated uses both service type and server identification to route the messages in at least one embodiment.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7, 11-19, and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramasubramani (6507589) in view of Barzegar (5894478), and in further view of Sasamoto (6647264).

Regarding claims 1 and 13, Ramasubramani discloses a messaging system, comprising:

at least one protocol gateway (Column 5, lines 42 – 48; Column 15, lines 1 – 12) to establish and manages a network connection with at a network (Column 9, lines 26 – 30); mapping a message key (Col. 6, lines 33 - 39) and

a communicator to communicate, based on a unique combination of said service

type and said server identification (ID) (Col. 17, ll. 34 – 49; Col. 18, ll. 45 – 49, wherein

the service identification is the specified port of the gateway which identifies a specific

gateway process), a mapped message between said client and a particular server

supporting said message key (Col. 6, lines 33 – 39, where the message key can be a

service type) over a wireless network protocol through said protocol gateway (Column

12, lines 37 – 45).

Ramasubramani does not explicitly indicate that the protocol gateway uses an

indirect message router table to direct the messages to an IP address of said server or

that the network (Figure 2, element 216) includes a registered message router, having a

TCP connection with the message router.

Ramasubramani suggests that the internal message router of the gateway

utilizes an indirect message routing table to route messages received from the client

(Col. 17, ll. 11 – 14) wherein the processes are designed to be indirectly addressed

based on type of service of the message rather than directly addressed (Col. 17, ll. 34 –

43).

One of ordinary skill in the art at the time the invention was made would know

that the external server processes of Ramasubramani (see Col. 6, ll. 33 – 39) can be

addressed by the internal message router in the same way as the internal processes

because Ramasubramani is silent as to how the external servers are addressed and the

indirect message routing allows the client to transparently (and with load balancing) be

directed to the proper server for the desired service.

Barzegar teaches a system with a protocol gateway that establishes connections through a message router (Column 3, lines 56 – 58).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Barzegar's teaching of message authentication to increase the security of the system and prevent unauthorized requests.

Sasamoto teaches a system for routing messages between gateways and message routers (Fig 1, elements 111 and 114) in which the gateway manages TCP/IP connections between the router and the gateway, and which the router is registered within a router table of the gateway (Col. 5, lines 29 - 65; Col. 1, lines 14 - 20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve the system, by adding in Sasamoto's system to allow the gateway to monitor and watch which router to forward messages to allow mobile devices to receive messages despite handoffs and movement by those devices.

Regarding claims 2 and 14, Ramasubramani discloses the messaging system according to claims 1, 13, and 24, wherein at least one message router for routing said message between said protocol gateway and said server (Column 23, line 64 – Column 24, line 3).

Regarding claims 3 and 15, Ramasubramani discloses the messaging system according to claims 2 and 14.

Ramasubramani does not explicitly indicate said at least one registered message router further comprises means for authenticating an origin of said message.

Barzegar teaches a system with protocol gateways and a message router where

the message router is programmed to authenticate messages based on who sent them

(Column 3, lines 56 – 58).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to use Barzegar's teaching of message authentication to increase

the security of the system and prevent unauthorized requests.

Regarding claims 4 and, 16, Ramasubramani discloses the messaging system

according to claims 3 and 15.

Ramasubramani does not explicitly indicate that the authenticating means

authenticates said origin before said message is routed by said at least one registered

message router.

Barzegar teaches a system with protocol gateways and a message router where

the authenticating means authenticates said origin before said message is routed by

said message router (Column 3, lines 56 – 58).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to use Barzegar's teaching of message authentication to increase

the security of the system and prevent unauthorized requests.

Regarding claims 5 and 17, Ramasubramani discloses that there is a database

accessible by said message router and adapted to store information relating to routing

and authentication of said message (Column 24, lines 19 – 24).

Regarding claims 6 and 18, Ramasubramani discloses the messaging system

according to claims 1, 13, and 24, further comprising an HTTP proxy server adapted to

receive a plurality of HTTP requests from said client device, send each said request

over an Internet to said server, and transmit a response corresponding thereto from said

server to said client device (Column 5, lines 44 – 47; Column 12, lines 37 – 45).

Regarding claims 7 and 19, Ramasubramani the messaging system according

to claims 6 and 18, wherein: the HTTP proxy server is adapted to support one or more

HTTP protocols (Column 12, lines 37 – 45).

Regarding claims 11 and 22, Ramasubramani discloses the messaging system

according to claims 1 and 13, further comprising there is a means for supporting a

message retry in each of a plurality of wireless network protocols (Column 7, lines 30 –

33).

Regarding claims 12 and 23, Ramasubramani discloses the messaging system

according to claims 1 and 13, further comprising there is a means for supporting a

message ACK/NACK service in each of a plurality of wireless network protocols

(Column 7, lines 30 – 33).

Claims 8 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Ramasubramani in view of Barzegar, and Iwama and in further view of Boyle

(6119167).

Regarding claims 8 and 20, Ramasubramani discloses the messaging system

according to claims 6 and 18.

Ramasubramani does not explicitly indicate that the HTTP proxy server

comprises: means for creating a TCP/IP socket connection; and means for managing

said TCP/IP socket connection.

Boyle '167 teaches a wireless protocol gateway and http proxy that creates a

TCP/IP socket connection; and manages said TCP/IP socket connection (Column 3,

lines 27 – 40).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to use Boyle's teaching of the TCP/IP connection

Ramasubramani's system in order to have a TCP/IP connection to connectionless

wireless protocols.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Ramasubramani in view of Barzegar, and Sasamoto and in further view of Kung

(6826173).

Regarding claim 9, Ramasubramani discloses the messaging system of claim 1.

Ramasubramani does not explicitly indicate that there is an SNMP manager.

Kung discloses a system with a multiple protocol gateways that communicate

using SNMP communication (Column 13, lines 5 – 9).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to use Kung's in Ramasubramani's system in order to allow the

management service of the messaging system send commands to other devices in the

system using the common SNMP protocol from an SNMP manager.

Claims 10 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Ramasubramani in view of Barzegar, and Sasamoto and in further view of

Boyle (6138158).

Regarding claims 10 and 21, Ramasubramani discloses the messaging system according to claims 1 and 13.

Ramasubramani does not explicitly indicate that the system is further comprising: means for defining a maximum segment size; means for determining if said message exceeds said maximum segment size; and means for segmenting said message into a plurality of message segments, none of said plurality of message segments exceeding said maximum segment size.

Boyle '158 teaches a messaging system (Column 8, line 52 – Column 9, line 2) that includes defining a maximum segment size; means for determining if said message exceeds said maximum segment size; and means for segmenting said message into a plurality of message segments, none of said plurality of message segments exceeds said maximum segment size (Column 13, lines 37 – 48).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Boyles teaching of breaking up messages in Ramasubramani's system because some of the messaging protocols may only be able to support a maximum message size and Boyles system allows long messages to be broken up to the max size and transferred.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to KEVIN BATES whose telephone number is (571)272-

3980. The examiner can normally be reached on M-F 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Rupal Dharia can be reached on (571) 272-3880. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KEVIN BATES/
Primary Examiner, Art Unit 2456